JVC

# SERVICE MANUAL

KD-A11 A/B/C/E/J/U STEREO CASSETTE DECK



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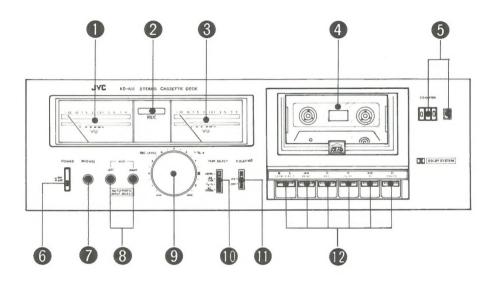
## **Specifications**

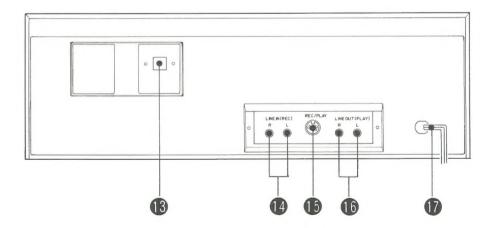
Type Track system Tape speed Frequency response: (0 VU recording) Metal tape SA/Chrome tape SF/Normal tape (-20 VU recording)	: Stereo cassette deck : 4-track, 2-channel : 1-7/8 inch/sec (4.8 cm/sec) *1 ; 40-11,000 Hz (± 3 dB) *2 ; 40-8,000 Hz (± 3 dB) *3 ; 40-8,000 Hz (± 3 dB)	Motor : Fast forward time : Rewind time : Semiconductors : Input terminals : Mic jack x 2 ;	Electronic governed DC motor 95 sec. with C-60 cassette 95 sec. with C-60 cassette 3 ICs, 21 transistors, 17 diodes 1 LED Max. sensitivity; 0.2mV (-72 dBs) Matching impednace;
Metal tape SA/Chrome tape	*1;30-16,000 Hz 40-15,000 Hz (±3 dB) *2;30-16,000 Hz 40-15,000 Hz (±3 dB)	Input jack x 2 ;	$600\Omega-10k\Omega$ Min. input level; $80mV$ (-20 dBs) Input impedance; $100k\Omega$
SF/Normal tape	*3 ; 30–15,000 Hz	Output terminals :	mpac mpodano, rooms
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	40-14,000 Hz (± 3 dB)	Output jack x 2;	Output level; 300mV
*2 TDK SA		Phones jack x 1;  DIN socket :	Output impedance; $5k\Omega$ Output level; $0.3mW$ ( $8\Omega$ ) Matching impedance; $8\Omega - 1k\Omega$ Min. input level; $0.1mV/k\Omega$ Input impedance; $10k\Omega$ Output level; $380mV$ Output impedance; $5k\Omega$
Wow and flutter  Crosstalk  Harmonic distortion	(DIN 45 500 weighted) : 0.05% (WRMS), 0.15% (DIN 45 500) : 65 dB (1 kHz) : K3; 0.5%, THD; 1.0%	Power requirement :	AC 240V, 50Hz (KD-A11A) AC 240/220/120V, 50/60Hz (KD-A11B/C/E/J) AC 240/220/120/100V, 50/60 Hz (KD-A11U)
	(metal tape, 1 kHz 0 VU)	Power consumption:	
Bias	: AC bias	-	16-1/2"(420 mm)W
Erasure	: AC erasure		5-1/4" (134 mm)H
Heads	: 2 heads METAPERM head for recording/ playback and 2-gap ferrite head	Weight :	10-3/8''(264mm)D 9.9 lbs (4.5 kg)
	for erasure	Design and specificat without notice.	ions are subject to change

### **Features**

- Single lever 4-stage tape select switch makes the KD-A11 compatible with all types of tape including the new metal Tape format.
- IC-built Dolby\*Noise Reduction System
   Dolby System greatly improves performance by cutting
   out tape hiss, without changing the original music, thus
   making it every bit as good as professional standard type
   open reel tapes. High reliability and optimum quality
- are assured through employment of IC-built circuitry. (Dolby\* is trademark of Dolby Laboratories Inc.)
  (Noise Reduction System manufactured under license from Dolby Laboratories Inc.)
- METAPERM head for recording/playback
   2 Gap ferrite head for erasure
- Automatic input select

### **Controls and Connections**

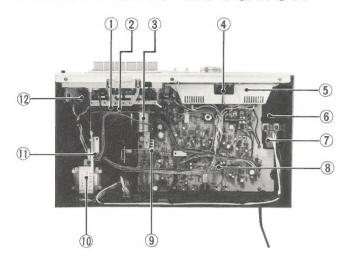




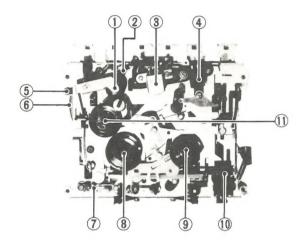
- **0 3** VU meters
- 2 Recording indicator (REC)
- Cassette holder
- Tape COUNTER/counter reset button
- 6 POWER switch
- PHONES jack
- 8 MIC jacks
- REC LEVEL controls
- TAPE SELECT switch
- Dolby noise reduction switch (DOLBY NR)

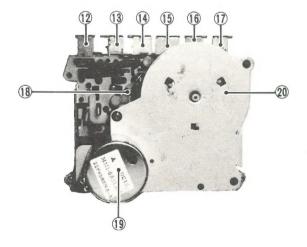
- ② Cassette operation buttons.
  - ▲ STOP/EJECT button
  - ◀◀ REWIND button
  - o Record button (REC)
  - PLAY button
  - ▶▶ FF button
  - PAUSE button
- ₩ Voltage select switch (KD-A11 B/C/E/J/U)
- LINE IN (REC) terminals
- DIN (REC/PLAY) socket
- LINE OUT (PLAY) terminals
- Power cord

### **Main Parts Location**



- 1. Flywheel/capstan belt
- 2. Auto stop solenoid
- 3. Motor
- 4. Recording indicator P.W.B.
- 5. Meter cover
- 6. Remote bar
- 7. Power switch P.W.B.
- 8. Main Amp P.W.B.
- 9. Recording spring
- 10. Power Transformer
- 11. Oiled-gear damper assembly
- 12. Reed switch P.W.B.





#### (Mechanical parts)

- 1. Pinch roller arm assembly
- 2. Pinch roller spring
- 3. REC/PB Head
- 4. Erase Head
- 5. Pause switch
- 6. Flywheel
- 7. Motor switch
- Take up reel disc ass'y
- 9. Supply reel disc ass'y
- 10. Recording safety lever11. Take up idler assembly
- 12. Stop/eject bar assembly 13. Rewind bar assembly
- 14. Recording bar assembly
- 15. Play bar assembly
- 16. Fast forward bar assembly
- 17. Pause bar assembly
- 18. Motor
- 19. Flywheel/Motor bracket

### Maintenance

To get long, trouble-free service, maintenance is important. Do not forget cleaning and demagnetizing.

#### Cleaning

After long use, the heads and tape part — capstan, pinch roller, etc. — will become dirty with dust or magnetic particles. Dirty heads cause imperfect erasing or high frequency drop-off. A dirty capstan and pinch roller will cause unstable tape speed, leading to increased wow and flutter. Always keep them clean by following the procedure below.

#### 1. Heads

- 1) Push Eject button to open the cassette holder.
- 2) Use the head cleaning stick provided to wipe the surface where the tape comes into contact with the head. (It is effective to moisten the cotton with alcohol.)

#### 2. Pinch rollar and capstan

Do the same method as heads.

#### 3. Cabinet

When the cabinet becomes dirty, wipe it with a soft cloth soaked with a neutral cleaning solution of a polishing cloth.

\* Do not use thinner or benzine.

#### Demagnetizing

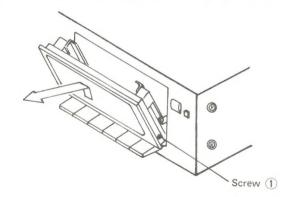
The heads are made from a material resistant to magnetization, but after long use they become magnetized.

A magnet brought into their vicinity can magnetize the heads, causing excess noise. If noise seems to have increased, demagnetize the heads with a head demagnetizer through the following procedure.

- 1. Turn the POWER switch OFF.
- 2. Wrap the tip of the demagnetizer with vinyl tape or soft cloth so as not to damage the head surface. Switch on the demagnetizer and bring it close to the head.
- Move the tip of the demagnetizer slowly first to the left and right, then up and down in front of the head.
   Gradually move it away from the head and switch it off at a distance of more than 30 cm. (12")
- 4. The erase head need not be demagnetized. The capstan shaft and tape guide should be demagnetized in the same way as the record/playback head.
- \* Do not bring a magnetized metallic object (a screwdriver, for example) near the head as this will increase noise.

### Removal of the Main Parts

Observe care in handing the parts since the parts are small in size and the distance between them are short due to a deck design aimed mainly at compactness and high performance.



#### **ENCLOSURE ASSEMBLY PARTS**

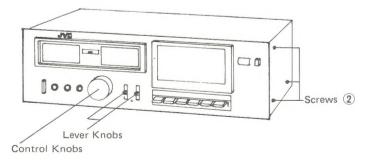
#### Cassette lid ......

1) To open the cassette lid, push on the eject lever.

Remove a screw 1 fastening the cassette lid. (its right low side)

Be careful of holding a nut.

2) Pull off the cassette lid to upper side.



#### Top cover .....

Remove 6 screws (left and right ..... 3 screws ② on each)

#### Control knobs (REC LEVEL) ......

Pull off them to forward.

#### Lever knobs (TAPE SELECT, DOLBY NR) .......

Pull off them to forward.

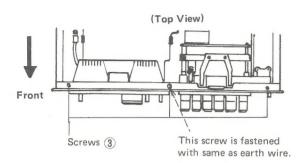
#### Bottom cover ......

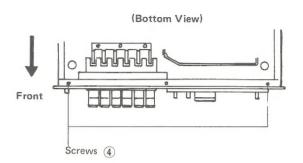
Remove 3 screws fastening the bottom cover. (center screw is long size.)

Remove the bottom cover from 3 pawls of mold chassis.

#### Front plate assembly ......

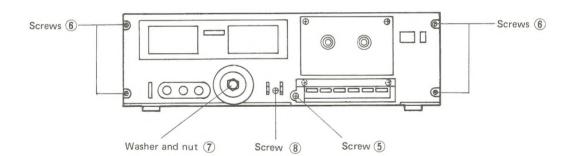
Remove 5 screws (3 screws 3 on upper side and 2 screws 4 on bottom side.) fastening the front plate assembly.





#### Front panel assembly

- 1. Remove a screw (5) fastening the button escutcheon ass'y (left side)
- 2. Open the cassette holder, and remove a screw fastening the arm ass'y for oiled-gear damper.
- 3. Remove 4 screws (6) fastening the front panel. (left and right ..... 2 screws on each)
- 4. Remove a washer and a nut 7 fastening the REC LEVEL control VR shaft.
- Remove a screw (8) fastening the lever switch on main amp P.W. Board ass'y.
   (Mechanical assembly is removed with the same as front panel.)



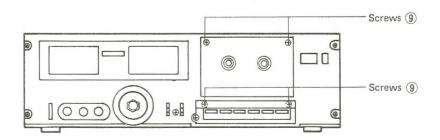
#### MECHANICAL ASSEMBLY

- 1. Remove the counter belt from counter.
- 2. Remove 4 screws (9) fastening the front panel.

If you remove the mechanical assembly with not removed the front panel, do the following method.

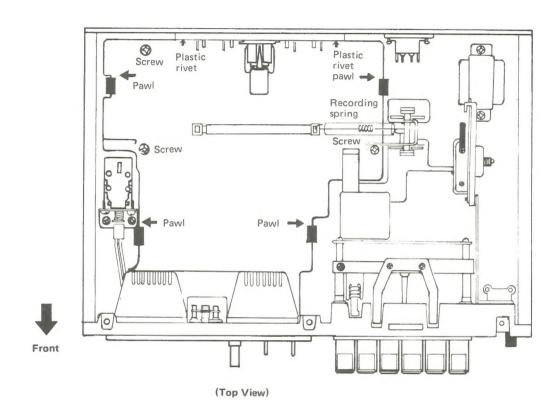
1) Remove the mecha control plate.

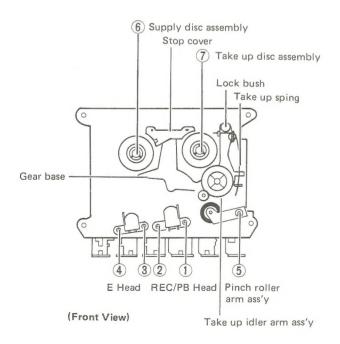
 Remove 4 screws (9) fastening the front plate.
 (When assembling the mechanical control plate, it need a new parts = the mechanical control plate cannot use again.)



#### ELECTRICAL PARTS (Main amp P.W. Board ass'y)

- Remove a nut and a washer fastening the REC LEVEL control VR shaft.
- 2) Remove a screw fastening the lever switch.
- 3) Remove 3 screws fastening the main amp P.W. Board.
- 4) Remove 2 plastic rivets fastening the PIN jack assembly.
- 5) Remove the record spring.
- 6) Remove 4 pawls for holding the main amp P.W. Board.





#### MECHANICAL PARTS

1. REC/PB head ......

Remove a screw ①
Remove a screw ② for adjustment.

2. Erase head .....

Remove a screw (3)

Remove a screw 4 for adjustment.

3. Pinch roller arm ass'y ......

Remove an E-ring (5) holding its assembly. Pull it off from the shaft.

4. Supply reel disc ......

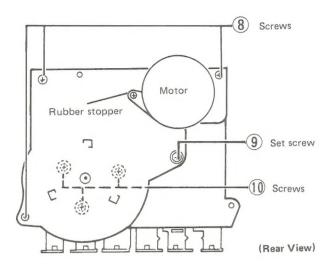
Pull out the reel disc stopper (6) and pull out its disc from shaft.

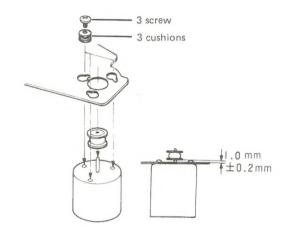
5. Take-up reel disc ........

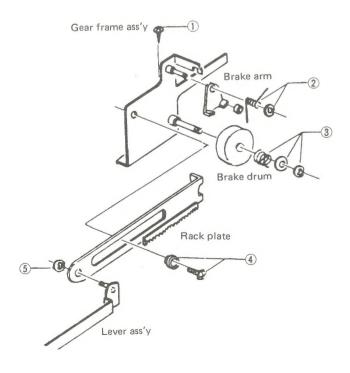
Pull out the reel disc stopper and remove the counter belt, pull out its disc from shaft.

Note: (1) Remove the reel disc stoppers with a piece of sheet metal inserted between the reel disc and the stopper. (When assembling the reel disk, the stopper need a new parts. (the stopper can not use again.)

(2) Be careful not to stain the counter belt.







#### Flywheel assembly

- 1. Remove 3 screws 8 and a set screw 9 fastening the flywheel and motor bracket.
- 2. Remove a capstan belt.
- 3. Remove 3 screws fastening the capstan metal.
- Remove the pressure lock bushing and the take up spring on front side, and then remove the take up idler arm assembly.
- Remove the pressure position of stopper cover, and move the gear base to supply disc direction, and then remove the gear base tip from the groove of capstan metal
- 6. Pull off the flywheel assembly.

**Note:** When assembling the flywheel, fasten the screws after assembled the chassis to the groove of capstan metal.

#### Motor

- 1) Remove a screw fastening the rubber stopper.
- Remove the capstan belt from the motor pulley.
- 3) To remove the motor, turn it in counterclockwise direction and pull it out backward (with 3 cushions and 3 screws for fastening the motor).

Note: When replacing the motor, check the following points.

- (1) Is the motor placed in correct position? (Don't make the motor's position deflective.)
- (2) Does the capstan belt run in the center of the motor pulley?

#### DOOR BRAKE AND ITS RELATED PARTS

- 1. Gear frame ass'y ...... Remove a screw (1).
- 2. Brake arm and tire ......Remove the E-ring and torsion spring (2).
- 3. Spur gear and brake drum ...... Remove the E-ring, and spring ③.
- 4. Rack plate ...... Remove the screw and the collar 4.
- 5. Brake lever ass'y ...... Remove the E-ring (5).

### Main Adjustments

#### [1] Equipment and measuring instruments used for adjustment.

#### 1. Electrical adjustment

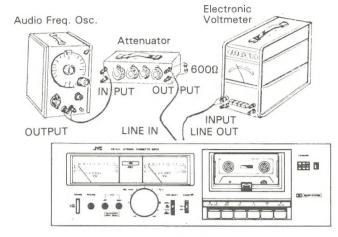
- 1) Electronic voltmeter
- 2) Audio frequency oscillator (range; 50–20 kHz and output 0 dB with impedance 600  $\Omega)$
- 3) Attenuator
- 4) Standard tapes for REC/PB SONY CS-30 — FeCr tape BASF T308S — NORMAL tape BASF C401R — CrO2 tape SCOTCH METAFINE — METAL tape

or equivalent

- 5) Reference tapes for playback (JVC Test Tape)
  VTT-658 (for head azimuth adj.)
  VTT-656 (for motor speed, wow flutter adj.)
  VTT-664 (for Reference level 1 kHz)
  VTT-675N (for playback frequency response)
- 6) Resistors 100  $\Omega$  (for measurement of the bias current) 600  $\Omega$  (for attenuator matching)



- 1) Gauge for checking the head position.
- 2) Torque gauge
- 3) Blank tape (C-120) for tape running checker.



KD-A11

#### [II] Adjustment and repair of the mechanism

(Adjust the mechanism or confirm that it is in normal operating condition prior to the adjustment of the electrical circuit.)

Item	Adjustment	Adjusting point	Standard value	Remarks
Adjusting record/playback head position     Adjusting record/playback head position	<ol> <li>Connect an electronic voltmeter to the LINE OUT terminals.</li> <li>Play back the VTT-658 test tape.</li> <li>Adjust the head angle with the screw (a) until the reading of the electronic voltmeter becomes maximum for both channels.</li> <li>After adjusting, set the screw with screw bond.</li> </ol>	Screw (A)	Maximum	1. If the head is worn, disconnected or exceedingly magnetized so as not to provide the necessary characteristics, replace it with a new one. After replacement, the head position adjustment as well as the playback level adjustment, the bias current adjustment and the recording level adjustment are all necessary.
Adjusting erase head height	<ol> <li>Tape-to-head contact adjustment</li> <li>Turn the adjusting screw  for aligning the erase head until it stops. Then, turn the screw  in the reverse direction by 180° (a ½ revolution).</li> <li>Employ a special cassette (C-120) from which parts to the casing, where the erase head, record/play back head and capstan engage, has been cut away. Perform tape transport with the cassette tape. Adjust the screw  until the tape runs in the center of the egase head tape guide.</li> <li>Check it again with a BASF C401R-CrO2 tape.         Checking method:         Record a 400 Hz or 1 kHz signal with 0VU+20dB. Erase the recording. Check if the erasing is satisfactorily performed.     </li> <li>After adjustment, apply screw bond on the adjusting screw to prevent its loosening.</li> </ol>	Prop. Tape	e guide	2. If the output difference between the left and right channels exceeds 3—4 dB, the head is defective. Replace it with a new one.  Be sure to perform this adjustment after replacing the erase head.

ltem	Adjustment	Adjusting point	Standard value	Remarks
Adjusting motor speed	Connect a speed meter to the LINE OUT terminals. Play back the VTT-656 test tape Adjust the semi-fixed resistor in the motor until the reading of the speed meter is 3000 Hz.	Semi-fixed resistor in the motor	3000 Hz	If the speed meter functions as a wow and flutter meter, also, connect the deck to the INPUT terminals of the meter.
Checking play- back torque	Employ a torque testing cassette tape for the checking, or remove the cas- sette cover and use a torque gauge.		40 ~ 70 gr-cm	If the standard torque is not obtained, replace the take-up reel disc assembly.
Checking fast forward torque	Measure the torque in the fast forward mode in the same manner as in the above.		More than 80 gr-cm	If the standard torque is not obtained, perform the following.  1. Clean the capstan belt, the idler circumference, the motor pulley, the take-up reel disc circumference, the flywheel circumference, etc.  2. Replace the capstan belt or idler ass'y.
Checking rewind torque	Measure the torque in the rewind mode in the same manner as in the above.		More than 80 gr-cm	If the standard torque is not obtained, clean the capstan belt, idler, motor pulley, flywheel circumference, supply reel disc circumference, etc.

#### [III] Repair of wow flutter

If wow and flutter increase, check the following points. If there is defect in revolving parts, the wow and flutter generated will increase in proportion to the number of revolu-

tions.

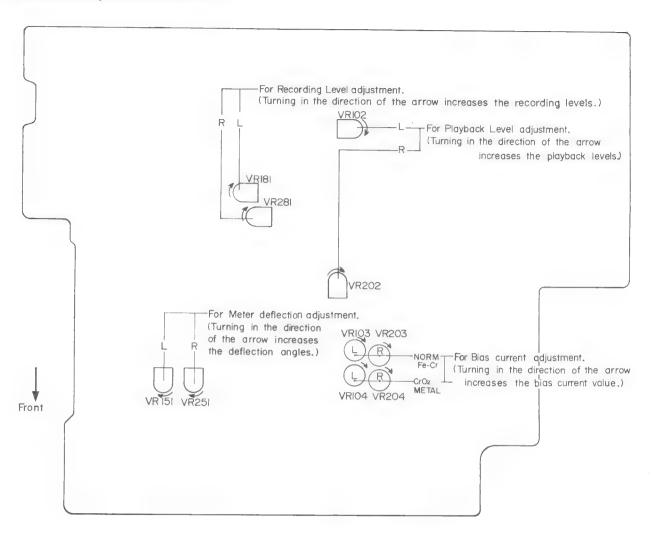
Play a 3000 Hz test tape, and defective part can be detected from the sound.

Section	Trouble	Repair
Capstan and flywheel	Capstan shaft has excessive run-out. Flywheel turns heavily. (shaft seisure, thrust play, etc.)	Replace flywheel. Clean the capstan shaft in the flywheel. Replace the capstan assembly.
Pinch roller	Rough rotation (Deformation scratches, or dust) The angular position of the pinch roller is not correct. The pinch roller pressure is not correct.	Replace pinch roller, or pinch roller spring. Clean the pinch roller. Adjust the pinch roller so that it is parallel with the capstan shaft.
Belt	Belt has undue run-out. Belt is dirty or slippery.	Check the belt. Replace the belt.
Back tension	Back tension is irregular, or back tension is too strong.	Replace back compression spring (under supply disc).
Motor	Motor shaft has undue run-out. Motor pulley is oily and dustry.	Replace motor. Clean motor pulley.

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#### [IV] Electrical adjustments location



#### [V] Electrical circuit adjustment procedure

In all the steps (marked by an asterisk\*) except the "Adjusting bias current", the adjustment is important. Be sure to perform it.

Adjustment should be performed in the sequential numerical order of the following:

Step	Item	Adjustment	Adjusting point	Standard value	Remarks
	Adjusting playback level	<ol> <li>Playback the VTT-664 Reference tape (1 kHz) with the Tape select switch set to the NORMAL position.</li> <li>Adjust VR 102 and VR 202 until the DIN OUT becomes 0.34V (about -7 dB).</li> </ol>	VR102, 202	0.34 V (-7 dB)	<ol> <li>This adjustment becomes necessary when a change in playback level results (for example, due to head replacement).</li> <li>Perform this adjustment with the Dolby N.R. switch set to OFF.</li> </ol>
	Playback frequency response	Playback test tape VTT-675N (1 kHz, 10 kHz) for following adjustment. If the 10 kHz signal gain become nearly equal to the I kHz signal gain, cut off the wire tip 106. If the 10 kHz signal gain become low level, select 104 or 105 connector so that 10 kHz signal and 1 kHz signal gains become flat response.			

Step	Item	Adjustment	Adjusting point	Standard value	Remarks
3*	Adjusting VU meter sensitivity	<ol> <li>Set the cassette deck to its recording mode.</li> <li>Apply a 1 kHz, approx10 dBs signal to the DIN IN terminals.</li> <li>Adjust the recording level controls until the signal is available at - 7 dBs at the DIN OUT terminals.</li> <li>Adjust VR 151 and VR 251 until the VU meters deflect to 0.</li> </ol>	VR151 251	0 VU	Perform the adjustment when the parts are replaced.
4	Checking record/ playback frequency response	Record 1 kHz, 100 Hz and 12.5 kHz signals at an input level of 0 VU to -20 dB. Play back the tape. Check to see that the 100 Hz and 12.5 kHz signal output deviations fall within the standard range, using the 1 kHz signal output as a reference. (It is basically desirable that the 1 kHz, 100 Hz and 12.5 kHz signal outputs are the same.	For nor- mal tape: VR103, 203 For CrO2 tape: VR104, 204	Reference frequency; 1 kHz 0±3 dB at 100 Hz 0±3 dB at 12.5 kHz	This checking should be performed for normal, chrome and metal tapes and for both right and left channels. Fe-Cr and METAL tapes use only to check.
5*	Checking recording bias cur- rent	Record 1kHz, 100Hz and 12.5kHz signals at an input level of 0VU to —20dB. Play back the tape.  Adjust VR103 and VR203 (for a normal tape), VR104 and VR204 (for CrO2 tape), until the indicated deviation of the 12.5 kHz signal output from the 1kHz signal output becomes 0.		Output deviation; 0	formed referring to the record/ playback frequency response. This is because the frequency response of a cassette deck depends more greatly upon the bias current than does that of an open reel deck. The current measuring method described below is an alternative one. 2. If the bias current is not properly adjusted the record and playback characteristics become as shown below.  Increase in high frequencies (with small bias current)  Optimum level  Decrease in high frequencies (with a larger bias current)
6	Adjusting recording level	<ol> <li>Apply a I kHz, approx10 dB signal to the DIN IN terminals. Adjust the recording level controls until the signal is available at -2 dBs at the DIN OUT.</li> <li>After checking to see if the VU meter becomes to 0, record the signal applied to both left and right channels using a normal tape.</li> <li>Play back the recorded part. Perform the recording signal adjustment with VR181 and VR281 so that the VU meter becomes to 0.</li> </ol>	VR142, 242	0 VU	The level difference between left and right channels for normal tape, chrome tape and metal tape should be less than 1 dB (1 VU). Perform the adjustment using a normal tape, level difference between recording and playback for CrO2 and metal tapes should be less than 1.5 dB, and that between left and right channels should also be less than 1 dB.
7	Checking record/ playback signal dis- tortion	<ol> <li>Record a 1 kHz, 0 VU -7 dBs signal to DIN IN terminals and perform recording with the VU meter becomes 0 VU.</li> <li>Play back the recorded part. Check the output with a distortion meter to see if the value conforms to the standard value.</li> </ol>	Normal t less tha		Be sure to perform this adjustment fol lowing bias current and recording level adjustments.

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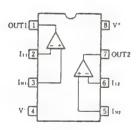
Step	Item	tem Adjustment		Adjustment Adjusting Standard value		Remarks	
8	Checking signal to noise ratio recording/ playback  1. Record a 1 kHz, 0 VU signal. Stop the input by disconnecting from the terminal to perform non-signal recording. Chrome tape; More than 42 dB Metal tape; More than 42 dB Metal tape; More than 42 dB Mo		nan 42 dB tape; nan 42 dB	Apply an output (–20.5 dBs) to the DIN IN terminals with the recording level controls set to maximum so that the VU meter becomes to 0.			
	Checking erasing co- efficient	terminals. Adjust the til the VU 2. Erase a par 3. Measure the the erased	Hz signal to the DIN IN recording level controls unmeter becomes to 0. t of the recording. e output difference between part and non-erased part to ith an electronic voltmeter.		More than 65 dB	For the measuring, connect a band pass filter between the deck and the electronic voltmeter.    Input (1 kHz 0 VU)   Tape deck (recording, erasing)   Electronic voltmeter	

## **Integrant Circuit**

[IC for Meter & HP Amp.]

UPC4557C

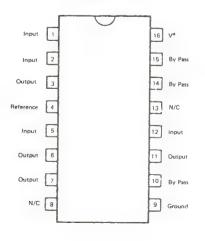
Top View

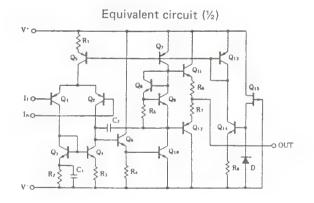


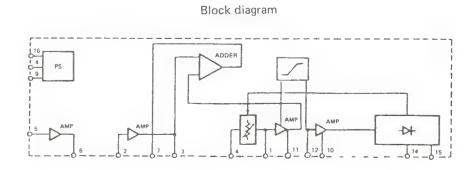
#### [IC FOR Dolby NR Circuit]

NE646BN

Top View

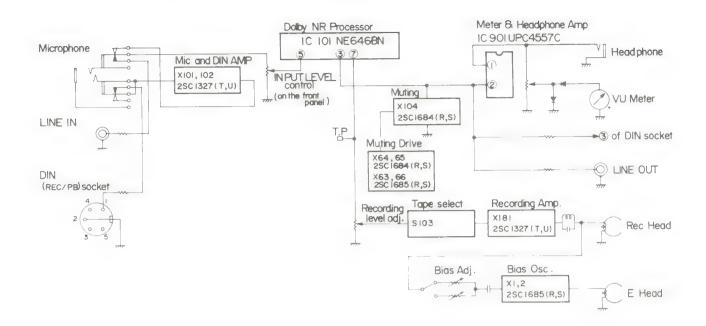




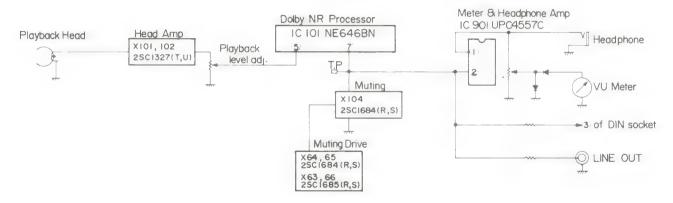


### **Block Diagram**

### **Recording system**

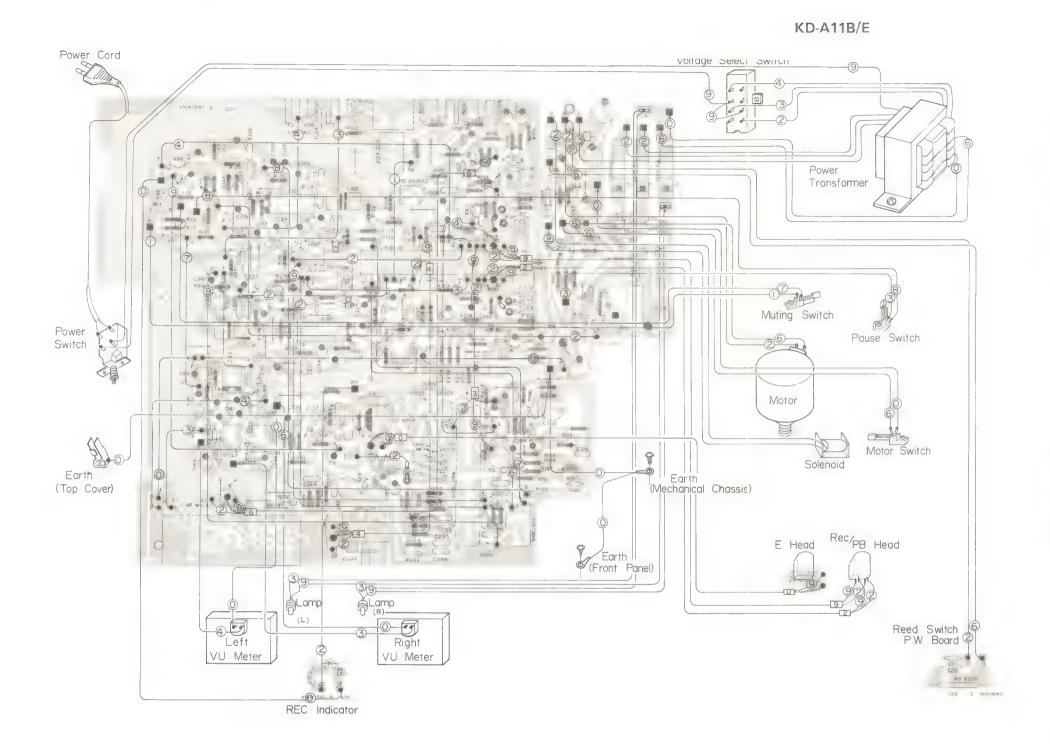


### Playback system



No. 4192

## **Wiring Connection**

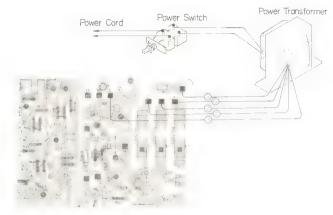


#### Color code are shown below

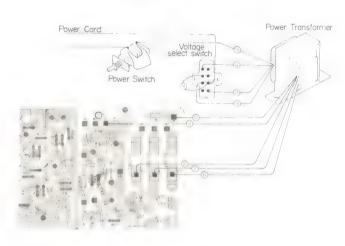
	000 010 01	101111 001011		
1		Brown	6	 Blue
2		Red	7	 Viole
3	********	Orange	8	 Grey
4	*********	Yellow	9	 Whit
5		Green	0	 Black

**–** 15 **–** 

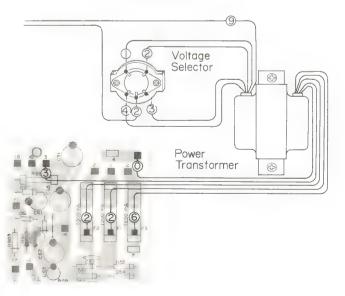
#### KD-A11A



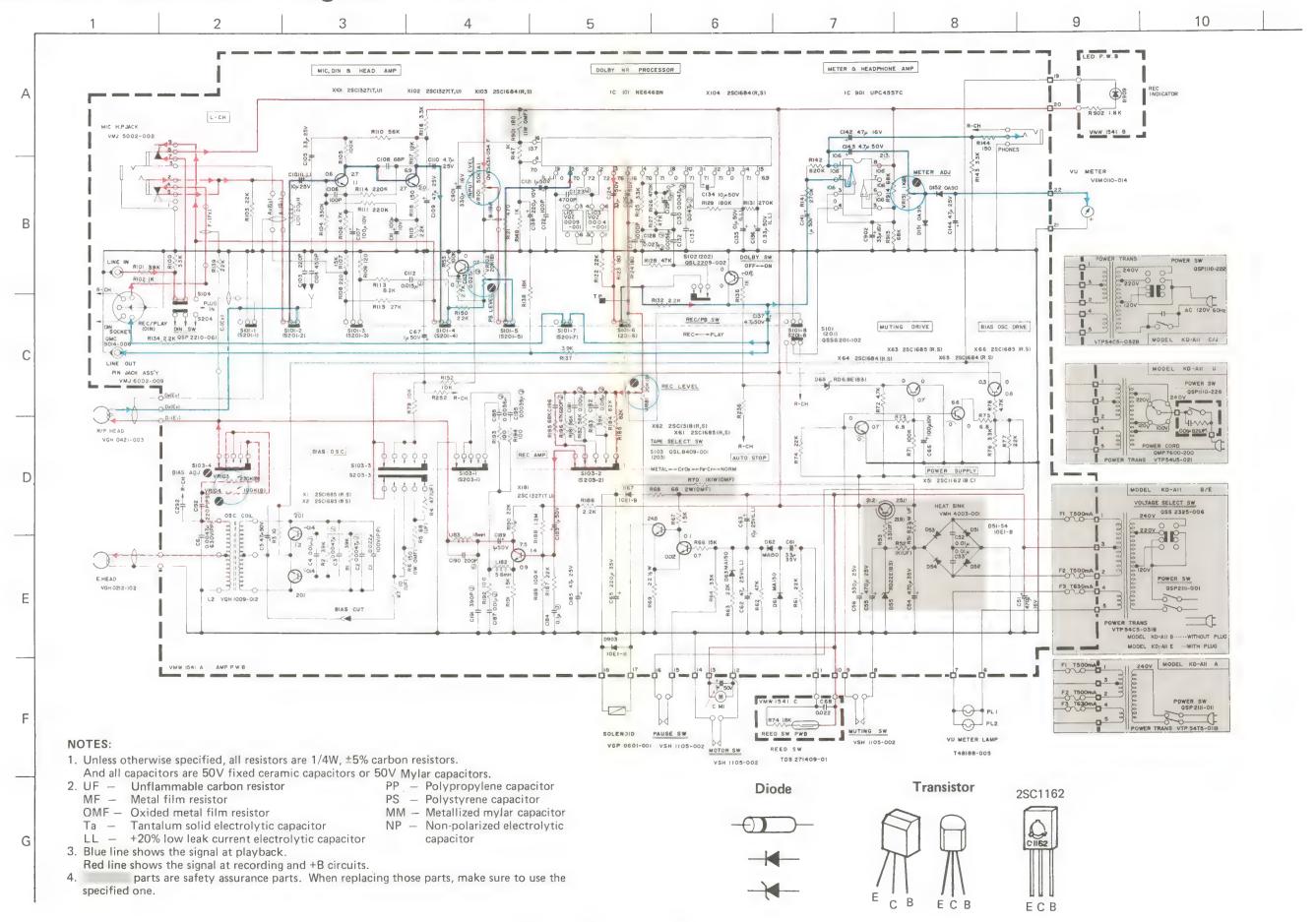
#### KD-A11C/J



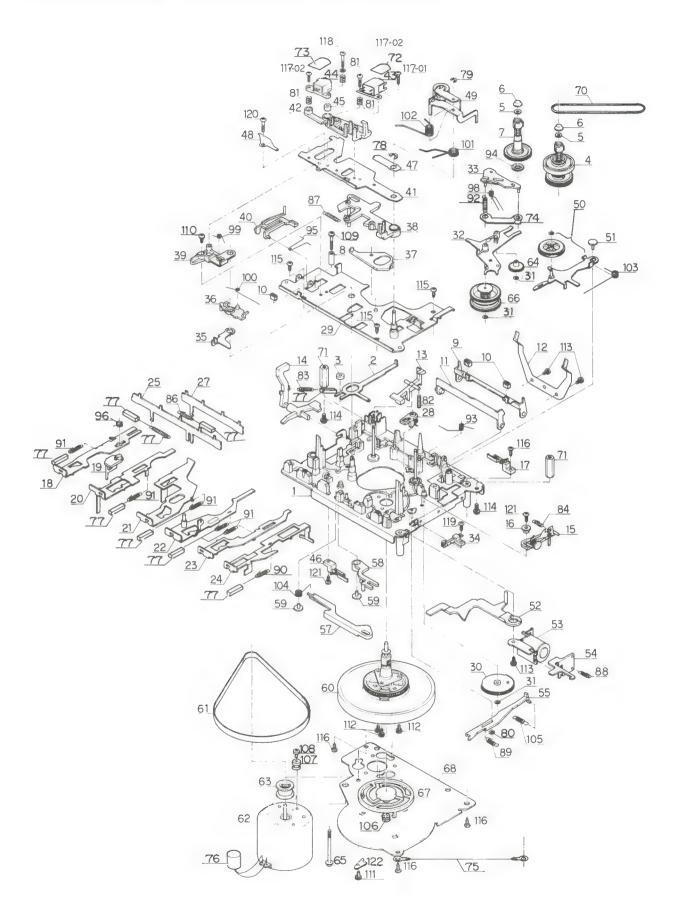
#### KD-A11U



### Standard Schematic Diagrtam of KD-A11



## **Mechanical Component Parts**



## **Mechanical Component Parts List**

Ref. No.	Parts No.	Parts Name	Remarks	Q'ty
1 2 3	VKL1171-00A VKL4733-001 VKS4213-001	Chassis Base Sub Ass'y Slide Bar Bushing	Brake	1 1 1
4 5	VKR4165-00A VKR4170-001	Take up Disk Ass'y Ring		1 2
6	VKS4131-001	Reel Stopper		2
7	VKR4172-00A	Supply Disk Ass'y		1
8	VKH3000-036	Collar		1
9	VKS4214-001 VKZ4137-001	Brake Lever Brake Rubber		1 3
11				
12	VKS4215-001 VKY4190-001	Switch Lever Pack Spring		1
13	VKS4217-001	Rec Safety		1
14	VKS4218-001	Lock Arm		1 1
15	VKS4243-00A	Pause Bracket Ass'y		1
16	VKH3001-034	Flange Collar		1
17	VSH1105-002	Switch	for Motor	1
18	VKL4735-001	Stop Bar		1
19 20	VKS4220-001 VKL4736-001	Select Cam Rew Bar		1
				1
21 22	VKL4737-002 VKL4790-00A	Rec Bar Play Bar Ass'y		1
23	VKL4740-00A	FF Bar		1
24	VKL4740-001	Pause Bar		1 1
25	VKL4758-001	Cam		1
27	VKL4789-001	Sub Cam		1
28	VKS4244-00A	Spring Holder Ass'y		1
29	VKL3236-00A	Button Cover Ass'y		1
30	VKR4179-001	Auto Cam		1
31	VKZ4004-001	Special Washer		3
32	VKL3245-00A	Gear Base Ass'y		1
33 34	VKS4222-001 VSH1102-001	Stopper Cover Switch	Pause	1 1
35	VKL4745-002	Lock Plate	rause	1 1
36	VKF4105-001	Rew Lever		1
37	VKS4224-001	FF Lever		1
38	VKS3119-001	Arm		1
39	VKS4225-00A	Arm Holder Ass'y		1
40	VKS4239-001	Door Safety		1
41	VKL3240-001	Head Base		1
42	VKS3120-001	Head Mount Base		1
43 44	VGH0421-003 VGH0212-102	R/P Head E Head		1
45	VKH3000-035	Collar		1
46	VSH1105-002	Switch	for Mut	1
47	VKY4183-001	Spring Plate		1
48	VKY4184-001	Pressure Plate		1
49	VKP4109-00A	Pinch Roller Arm Ass'y		1
50	VKL4748-00A	Take up Idler Arm Ass'y		1
51	VKS4233-001	Lock Bush		1
52	VKS4228-001	Select Arm		1
53	VGP0601-003	DC Solenoid Ass'y		1
54 55	VKL4861-001 *VKS4246-002	Trigger		1
55	V N 34240-002	Kick Lever		1

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Ref. No.	Parts No.	Parts Name	Remarks	Q'ty
57 58 59 60 61	VKS4230-001 VKS4231-001 VKS4233-001 VKF3112-00A VKB3001-007	Select Bar Switch Arm Lock Bush Flywheel Unit Ass'y Belt		1 1 2 1 1
62 63 64 65 66	MMI-6B2HD VKS4139-002 VKR4173-001 VKZ4009-001 VKR4174-00A	DC Motor Motor Pulley Rewind Gear Special Screw F.F Gear Ass'y		1 1 1 1
67 68 70 71	VKS4232-001 VKL4747-001 VKB3000-012 VKH3011-003	Flywheel Holder F. M. Bracket Belt Stud		1 1 1 1
72 73 74 75 76	VND4012-002 THS000489-02 VKS4248-001 VMZ0008-00B QET41HR-105N	Head Plate Head Label Synchro Arm Wire Ass'y E. Capacitor	Meta Parm 2 Gap	1 1 1 1
77 78 79 80 81	VKZ4139-001 REE3000 REE2000 REE1500 VKW3001-036	Silencer "E" Ring " " Spring	Compression for REC/PB, E Head	9 1 1 1
82	VKW3001-050	"	Compression for REC safety	1
83	VKW3002-047	"	Tension for Lock arm	1
84	VKW3002-048 VKW3002-049	"	Tension for Pause Bracket Tension	1
86	VKW3002-050	"	for Main cam Tension for Sub cam	1
87	VKW3002-051	"	Tension	1
88	VKW3002-057	"	for Arm Tension for DC solenoid	1
89	VKW3002-004	"	Tension for Kick Lever	1
90	VKW3004-003	"	Tension for Pause bar	1
91	VKW3004-002	,,	Tension Play Bar x 1 Select Cam x 1 Rew Bar x 1 Recording Bar x 1 FF Bar x 1	5
92	VKW3002-053	"	Tension Stop Cover	1
93	VKW4206-001	,,	Torsion Switch Bar	1
94	VKZ4003-003	Clutch felt	Back Tension	1
95	VKW4229-001	Spring	Torsion Door Safety	1
96	VKW4209-001	"	Torsion Select Cam	1

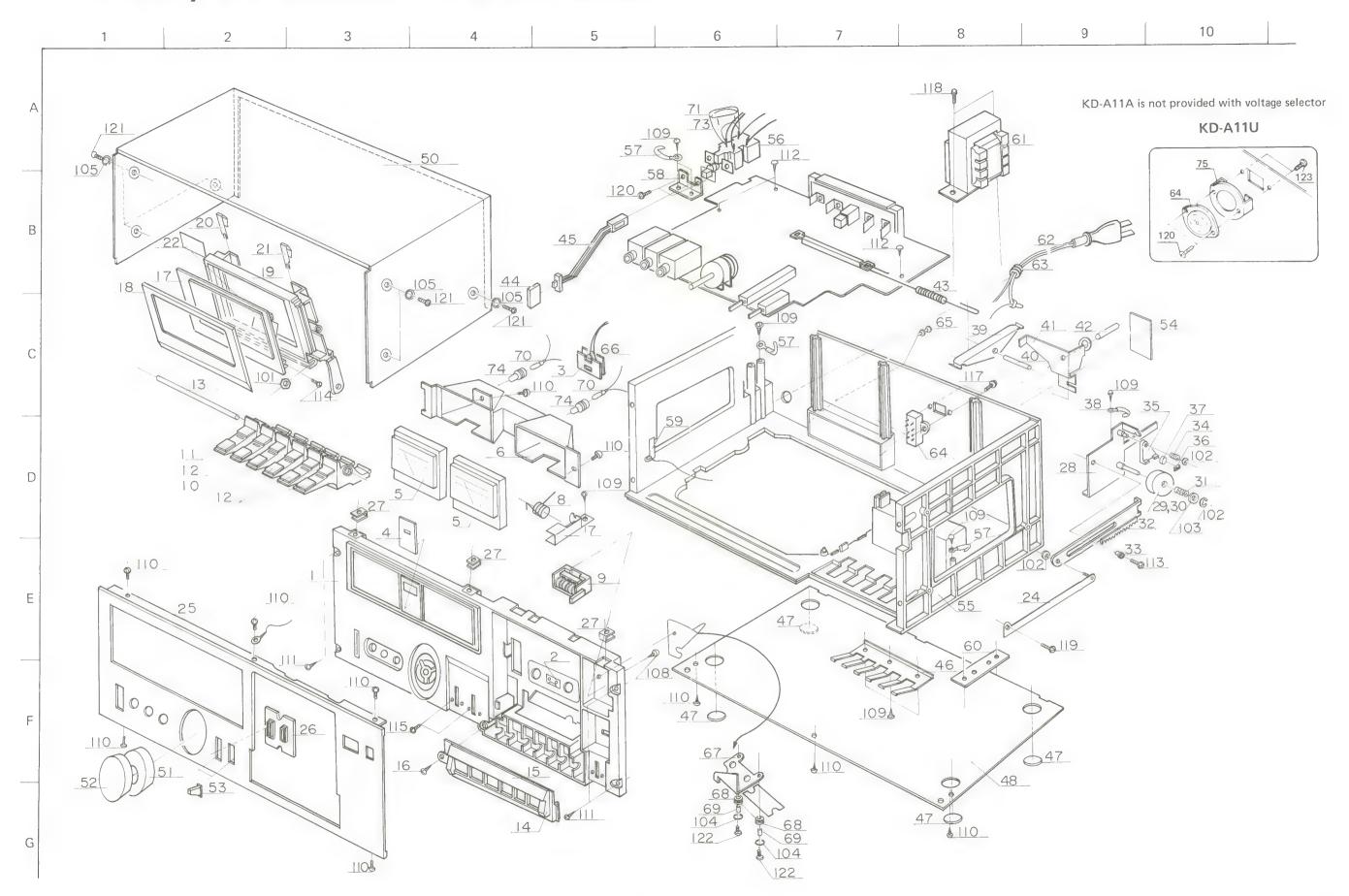
Ref. No.	Parts No.	Parts Name	Remarks	Q'ty
97	VKW4210-001	Spring	Torsion EF bar	1
98	VKW4211-003	11	Torsion Stop Cover	1
99	VKW4212-001	"	Torsion  Lock Plate	1
100	VKW4213-002	"	Torsion Rew Lever	1
101	VKW4214-003	"	Over stroke Pressure Plate	1
102	VKW4215-001	"	Torsion Pinch Roller	1
103	VKW4216-002	n .	Torsion Idler Arm	1
104	VKW4217-001	"	Torsion Select Bar	1
105	VKW3005-001	11	Tension Kick Lever	1
106	VKW3001-048	"	Flywheel	1
107 108 109 110 111	VKZ4130-001 VKZ4109-001 SPSP2614Z LPSP2605Z LPSP2604Z	Cushion Rubber Motor Screw Screw	for Motor for Motor Pinch Roller Stud Arm Holder Rubber Stopper	3 3 1 1
112 113	LPSP2605Z SPSP2604Z	"	Flywheel Ass'y DC Solenoid x 1	3
114 115 116	LPSP3006ZS SBSB2606Z SBSB2608Z	" " " " " " " " " " " " " " " " " " " "	Pack spring x 2 Stud Button Cover Ass'y Flywheel Bracket x 3 Motor Switch x 1	2 3 4
117-01 117-02 118 119 120	SPSX2008Z SPSX2010Z SPSX2014Z SPSP2606Z SPSP2010Z	" " " " "	Erase Head REC/PB Head Erase Head Pause Switch Pressure Plate	1 2 1 1 1
121	SPSP2604Z TFB345469-01	Rubber Stopper	Pause Bracket Ass'y x 1 Muting Switch x 1	2

# Enclosure Assembly and Electrical Parts list (Except P.W. Board Parts)

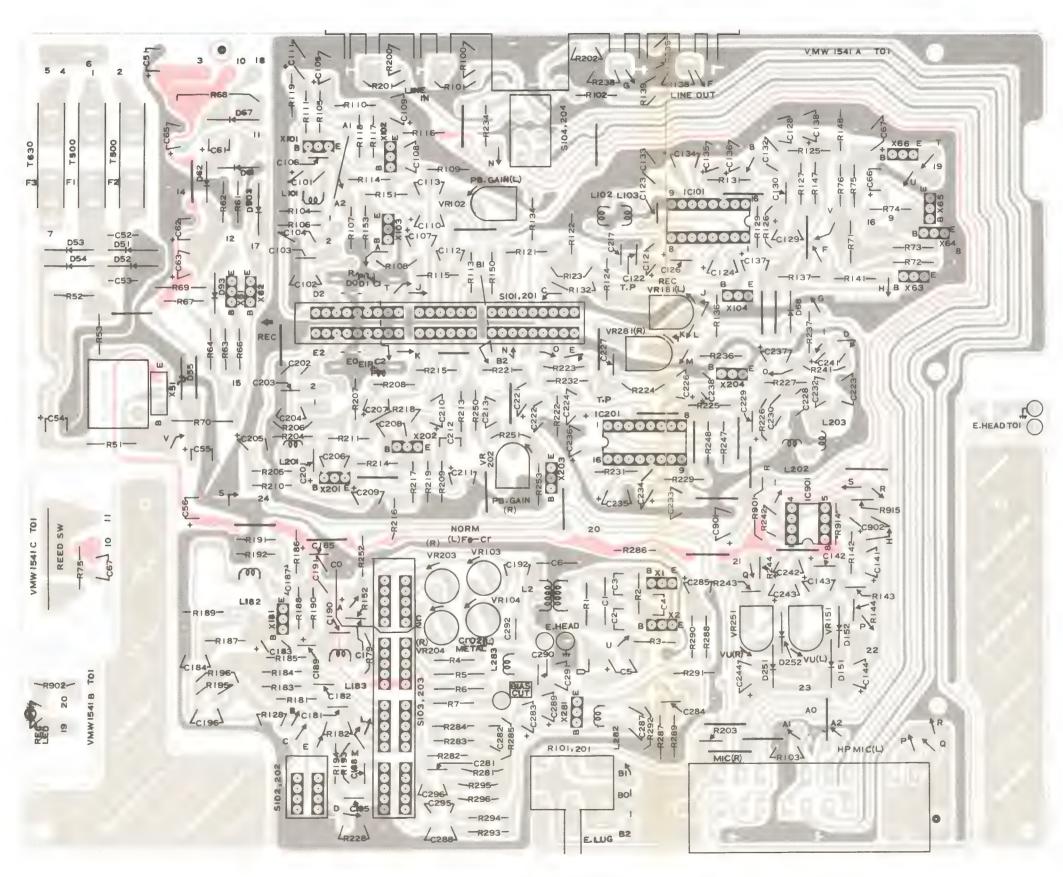
Ref. No.	Parts No.	Parts Name	Remarks	Q'ty
(1,2,4)	ZCKDA11Y-CBF-1	Front Panel Sub Ass'y		1 set
1	VJC1108-001	Front Panel		1
2	* VJD4162-002	Reel Disk Plate		1
3	* VJD4410-001	Escutcheon	for Rec LED	1
4	* VJD4369-002	Indicator Plate	TOT NEC LLD	
5	VGM0110-014	Level Meter		2
6	VKS2109-001			
7	VKL4697-001	Lamp Cover		1
8		Spring Bracket		1
	VKW4199-001	Spring		1
9	VKC5135-001T	Counter		1
10	* VXP3052-004	Mecha Button	Rec	1
11	* VXP3052-005	"	Stop	1
12	* VXP3052-006	"		4
13	VKH4268-001	Shaft	for Mecha Button	1
14	VJD3221-001	Button Escutcheon		1
15	* VJD4370-002	Control Plate		1
16	VKZ4007-001	Special Screw		li
(17~18)	ZCKDA11Y-CCA	Cassette Door Sub Ass'y		1 set
17	VJT3052-001	Cassette Lid		
18	VJT3053-001	Lid Plate		1
19	VJT2041-001	Cassette Holder		1
20	VKY4178-001			1
		Cassette Spring		1
21	VKY4178-002			1
22	* VJD4378-003	Mark	Meta Parm	1
23	VYSR102-014	Spacer		1
24	VKL4698-00A	Arm Ass'y	Cassette Holder	1
(25,26)	ZCKDA11Y-CBF-2	Front Plate Ass'y		1 set
25	* VJC1107-003	Front Plate		1
26	* VJD3222-003	Lever Escutcheon		li
27	TFB313563-02	Plate Nut		3
28	VKL4169-00A	Gear Frame Ass'y		1 set
29	VKS4236-001	Spur Gear		
30	VKS4109-004	Brake Drum		1
31				
32	VKW3001-006	Spring		1
	VKS3102-001	Rack Plate		1
33	VKH4123-001	Collar		1
34	VKW4106-001	Torsion Spring		1
35	VKS4110-002	Brake Arm		1
36	VKL4271-001	Rubber Retainer		1
37	VKZ4111-001	Rubber Tire		1
38	VKZ4001-011	Wire Holder		1
39	VKL4163-001	Rec. Arm (1)		1
40	VKH4121-001	Shaft		li
41	VKL4164-001	Rec. Arm (2)		l i
42	VKH4121-002	Shaft		1
43	VKW4244-001	Rec. Spring		1
44	VXP4066-001	Push Button	Power	
45	VKS4209-001	Remote Bar		1
			Power	1
46	VKY4111-002	Button Spring	Amp chassis	1
47	VJF4003-001	Foot	Amp chassis	4
48	VKL2123-001	Bottom Cover		1
49	VKL4291-002	Shield Plate		1
50	VJC1109-001	Top Cover		1
51	VXL4124-00A	Knob Ass'y		1
52	VXL4125-00A	"		1
53	VXQ4030-001	Lever Knob		2
54	VYN2068-002LA	Name Plate	KD-A11A	1
	VYN2068-001LA	//	KD-A11B	_
	" -003LA	"		1
	-003LA	"	KD-A11C	T
	-004LA	"	KD-A11E	1
	-007 LA		KD-A11E(SP)	1
	" -005LA	"	KD-A11J	1
	′′ -006LA	"	KD-A11U	1
55	VYH1116-001	Amp chassis		1 4
55	V 1111110 001	Allih cilassis	KD-A11A/B/U	

Ref. No.	Parts No.	Parts Name	Remarks	Q't
56	△ QSP2111-011	Power Switch	KD-A11A/E	1
	△ " -011BS	"	KD-A11B	1
	△ QSP1110-222	"	KD-A11C/J	1
	△ QSP1110-226	11	KD-A11U	1
57	VKZ4001-010	Wire Holder		2
58	VKL4194-001	SW Bracket		1
59	VKY4181-001	Earth Lug	for Ton Cover	,
60			for Top Cover	
00	VKL4167-001	Transformer Bracket		1
	⚠.VTP54T5-011B	Power Transformer	KD-A11A	
	VTP54U5-021	"	KDA-11U	1
61		"	KD-A11B	1
	△ VTP54C5-031B	11	KD-A11C/E/J	1
62	△ QMP2560-200	Power Cord	KD-A11A	1
	△ QMP1200-200	11	KD-A11C/J	1
	<b>△</b> QMP3900-200	11	KD-A11E	1
	△ QMP9017-008BS	"	KD-A11B	
63	△ QHS3876-252	Strain Relief	KD-A11A/E	1
05	△ QHS3876-252BS	Strain heller	The state of the s	
		"	KD-A11B	1
0.4	△ QHS3056-252		KD-A11C/J	1
64	△ QSS2325-011	Slide Switch	for Voltage Selector	1
			KD-A11C/E/J	
	△ QSS2325-011BS	Slide Switch	for Voltage Selector KD-A11B	1
	<b>△</b> QSR0084-001	Voltage Select Switch	KD-A11U	1
65	E48729-003	Plastic Rivet	for PIN jack	2
66	SLP-155B-01V	LED	REC	1
67	VKL4712-001	Switch Bracket	for Reed SW P.W.B	1
68	53492-002		TOT NEED SW F.W.B	
		Rubber Bushing		2
69	T30302-063	Collar		2
70	T47861-003N	Lamp		2
71	♠ QFH72BM-223	M.M Capacitor	KD-A22J 0.022μF	1
	<b>△</b> QFZ9008-223	"	KD-A22C 0.022μF	1
	QCZ9015-103	Capacitor	KD-A11U	1
72	△ TAW000504-01	Wire Connector	KD-A22C/J	2
73	△ T47047-001	Capacitor Boot	KD-A22C/J	1
74	VYH43I5-002		ND-M220/J	
74 75		Lamp Holder	V-14 0 1 . 0W WD 4441	2
	VKL4275-001	Bracket	Voltage Select SW KD-A11U	
101	NNS2600ZS	Nut	for Cassette Holder	1
102	REE2000	E ring	for Gear Frame Ass'y x 2	3
			Amp Ass'y ~ Gear Dump x 1	1
103	WNS2600Z	Washer	for Brake Drum	1
104	WNS3000N	"	for Reed SW P.W.B	2
105	Q03093-502	"	for Top Cover	é
106	" -524	"	for Spur Gear	1
108	SBSB2608Z	Tapping Screw	for Counter	1
109	SBSB3008Z	"	for Spring Bracket x 1	
.00	353530002			(
			Gear Dump x 1	
			Buttom Spring x 3	
			Switch Bracket x 2	
			Wire Holder x 2	
110	SBSB3010Z	"	for Lamp Cover x 2	
			Front Plate x 5	
			Bottom Cover x 3	
111	SBSB3012Z	"	for Front Panel	4
112	SBSB3012V	11	for Main P.W.B	3
113	SDSP2608Z	Screw	for Brake Arm	1
114	SDSP2610RS	JCI evv	for Cassette Holder	1
115	SDSP3006VS	"		
	SPSP3006ZS	"	for Tape Selector	1
116		11	for Reed Swtich	1
117	SDSP3008RS		for Voltage Selector	2
			KD-A11B/C/E/J	
118	DPSP4012ZS	"	for Power Transformer	2
119	LDSP2604R	Ass'y Screw	Arm Ass'y	1
			~ cassette holder	
120	LPSP3006ZS	Screw	for Power Switch x 2	4
		301011	for Bracket (KD-A11U) x 2	4
121	SDSB4010D	"		_
	SDSB4010R		for Top Cover	- 6
122	SPSP2608Z		for Reed SW P.W.B	2
	SDSP3006RS	Screw	for Voltage Selector	2
123	020.0000	OCICVV	KD-A11U	

## Enclosure Ass'y and Electrical Parts (Except P.W. Board Parts)



### Main Amp. P.W. Board Parts



		1	2	3	4	5	6	7	8
IC101	E. Voltmeter	7.08	7.17	7.61	7.07	6.98	7.17	6.44	0
201	C. Tester	9.2	7.0	7.4	7	4.8	7.0	6.7	0
IC901	E. Voltmeter	10.61	10.66	10.63	0	10.63	10.64	10.61	21.3
	C. Tester	11	11	11	0	11	11	11	21.5

		9	10	11	12	13	14	15	16
IC101	E. Voltmeter	0	7.06	7.08	7.05	0	7.1	6.92	13.73
201	C. Tester	0	7.0	7.0	6.9	0	6.9	6.4	14

	E. '	Voltme	ter	С	. Teste	r
	Е	С	В	E	С	В
X 101 201	1.12	2.67	0.58	1.0	2.7	0.5
X 102 202	2.07	6.87	2.67	2.0	6.6	2.7
X 103 203	0	0	0.7	0	0	0.7
X1	1.24	20.1	-0.14	1.2	20.5	-0.2
X2	1.24	20.1	-0.14	1.2	20.5	-0.2
X 181 281	0.85	7.54	1.42	0.82	6.9	1.1
X61	0.019	0.116	0.71	0.02	0.12	0.7
X62	0.019	24.8	0.116	0.02	25	0.12
X63	0	0.06	0.68	0	0.05	0.68
X64	0	0.68	0	0	0.68	0
X65	0	6.59	0	0	6.6	0
X66	0.01	0.32	0.85	0	0	0.84
X51	21.2	25.11	21.9	21.5	26	22

## Main Amp. P.W. Board Parts List

♠ parts are safety assurance parts.
When replacing those parts, make sure to use the specified one.

Ref. No.	Parts No.	Parts Name	Re	marks	Q'1
	∆VMW1541-002A	P.W.B			1
R100,200	QRD143J-333S	C. Resistor	33kΩ	1/4W	2
R101,201,1,2	QRD141J-393SY	"	39kΩ	"	4
R102,202,136,236	QRD143J-102S	"	lkΩ	"	6
147,247	G11D1400-1020		11/22		"
	QRD143J-223S	"	221-0	"	10
R103,203,122,222	UND 1433-2235		<b>22</b> kΩ		10
187,287,190,290					
61,74		"		"	
R104,204,	QRD141J-334SY		330kΩ		2
R105,205,153,253	" -104SY	"	100kΩ	"	7
189,289,71					
R106,206	" -472SY	"	$4.7k\Omega$	* * * * * * * * * * * * * * * * * * * *	2
R107,207,191,291	" -152SY	"	$1.5$ k $\Omega$	"	4
R108,208	" -221SY	"	$220\Omega$	"	2
R109,209	QRD141J-121SY	C. Resistor	120Ω	//	2
R118,218	" -151SY	11	150Ω	11	
R110,210	" -563SY	11	56kΩ	"	
R111,211,114,214	" -224SY	"		//	2
	-822SY	"	220kΩ	"	4
R113,213	" -392SY	,,	8.2kΩ		2
R137,237	-39231		3.9kΩ	***	2
R115,215	-2/351	"	27kΩ	"	2
R116,216,125,225	" -332SY		$3.3$ k $\Omega$	,,	6
143,243					
R117,217	" -123SY	"	12kΩ	"	2
R119,219,132,232	'' -222SY	"	$2.2$ k $\Omega$	//	10
150,250,134,234					
186,286				11	
R121,221	" -471SY	"	470Ω	"	2
3123,223,124,224	" -181SY	"	180Ω	11	7
R126,226	" -474SY	***	470kΩ	"	2
R127,227,128,228	" -473SY	"	47kΩ	"	2
R129,229	QRD141J-184SY	C. Resistor	180kΩ	,,	-
		C. Resistor		"	2
R131,231	" -274SY	,,	270kΩ		
R139,239	QRD143J-223S	11	22kΩ	,,	2
R141,241	QRD141J-274SY	"	$270k\Omega$		2
R142,242	QRD143J-824S		820Ω	"	2
R144,244	" -151S	"	150Ω	"	2
R138,238	QRD141J-183SY	"	$18k\Omega$	"	2
R151,251	" -272SY	"	. 2.7kΩ	11	1 2
R152,252	QRD143J-103S	"	10kΩ	"	2
3181,281,182,282	QRD141J-563SY	"	56kΩ	"	4
R183,283	" -393SY	***	39kΩ	"	2
R184,284	" -823SY	"	82kΩ	"	2
R185,285	" -823SY	"	82kΩ	,,	
R188,288	" -125SY	"	1.5MΩ	"	
R192,292,193,293	" -101SY	11		"	1
194,294	-10154		100Ω	••	2
	" 69367	,,	201.0	"	
R195,295	-00351	"	68kΩ	,,	
R196,296	-4/331	"	47kΩ		
33	QRD147J-100S		10Ω	1/4W	
R4	<b>△</b> QRD149J-470S	Unflammable Resistor	47Ω	"	
R5	△QRD149J-680S	"	68Ω	"	-   '
R6	<b>△QRG019J-151S</b>	"	$150\Omega$	1W	
R7	△QRD149J-100S	"	10Ω	1/4W	
R51	∆QRD126K-8R2	"	8.2Ω	1/2W	-
R52	∆QRD149J-102S	rr .	1kΩ	1/4W	
353	△QRD149J-330S	"	33Ω	1/-100	
R62	QRD141J-473SY	C. Resistor	47kΩ	**	
R63	" -222SY	C. Resistor		"	
R64		11	2.2kΩ	11	
	QRD147J-333S	"	33kΩ	"	
366	QRD147J-153S	"	15kΩ		
R67	-13231		1.5kΩ	"	1 1
R68 R69	△QRG029J-680	O.M.F. Resistor	$\Omega$ 86	2W	1
	<b>△</b> QRD121K-2R2	C. Resistor	$2.2\Omega$	1/2W	1 1

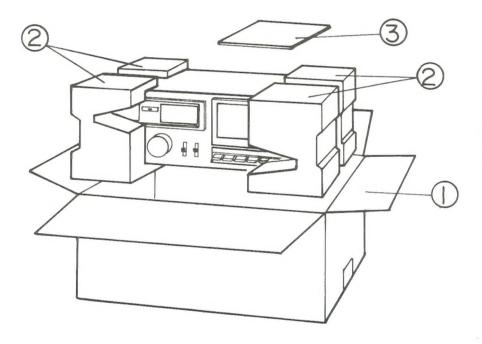
Ref. No.	Parts No.	Parts Name	Re	marks	Q'
R70	△QRG019J-102	O.M.F. Resistor	1kΩ	1W	1
R72	QRD141J-472SY	C. Resistor	4.7kΩ	1/4W	1
		o. resistor		.,	
R73,75	QRD147J-6R8S	"	6.8 Ω	"	2
R76	" -332SY	<i>"</i>	$3.3k\Omega$	"	1
R77	" -222SY	"	$2.2k\Omega$	11	1
R78	" -472SY	11	4.7kΩ	"	li
	" -103SY	"		"	
R79	-10551		10kΩ		1
R901	<b>∆QRG019G-181</b>	O.M.F. Registor	180 Ω	1W	1
R902	QRD147J-182S	C. Resistor	$1.8$ k $\Omega$	1/4W	1
R914,915	QRD143J-683S	11	68kΩ	"	2
11011,010		Bus Wire			
	QWY123-019		P=10mm	13	21
C101,201	QEB41EM-106M	E. Capacitor (Low Leak)	10μF	25V	2
C104,204	QCS11HJ-451	C. Capacitor	450pF	50V	2
C103,203	" -221	"	220pF	"	2
		F 0 :		051/	2
C105,205	QET41ER-336W	E. Capacitor	33μF	25V	2
2106,206,122,222	QCS11HK-101	C. Capacitor	10pF	50V	4
2107,207,111,211	QET41AR-107N	E. Capacitor	100μF	10V	5
66		L. Oupdoitoi	Ισομι	100	0
	000441114 000		00 5		
C108,208	QCS11HK-680	C. Capacitor	68pF	50V	2
C109,209,142,242	QET41ER-476F	E. Capacitor	47μF	25V	6
144,244					
	OFTAILD AZEN	"	47 -	5017	
C110,210,143,243	QFT41HR-475N		4.7μF	50V	4
C112,212	QFM41HJ-153	Mylar Capacitor	0.015μF	50V	2
0113,213	QFM41HJ-273	"	0.027μF	"	2
C121,221	QEB41HM-105M	E Conscitor / Law Last		"	2
		E. Capacitor (Low Leak)	1 μF		_
C123,223,130,230	QFM41HJ-472	Mylar Capacitor	0.0047 <sub>µ</sub> F	"	6
2,3					
0124,224,126,226	QET41HR-335N	E. Capacitor	3.3μF	"	4
				"	
C127,227	QCF11HP-102	C. Capacitor	0.001μF		2
C128,228	QFM41HJ-273	Mylar Capacitor	0.027µF	"	2
2129,229,134,234	QET41HR-106N	E. Capacitor	10 μF	"	4
C132,232				- 11	
	QFM41HJ-562	Mylar Capacitor	0.0056μF		2
C133,233	QFM41HJ-473	"	0.047μF	"	1
C135,235	QEB41HM-104M	E. Capacitor (Low Leak)	$0.1\mu$ F	"	2
C136,236	" -334M	"	0.33μF	"	2
C137,237		E Capacitar	4.7E	"	2
	QET41HR-475N	E. Capacitor	4.7μF		2
C138,238	QET41AR-227N	"	220µF	10V	2
C141,241,183,283	QET41HR-105N	"	1μF	50V	6
189,289				"	
	0.501444444	1	0.004 5	"	
C181,281	QFM41HJ-102	M. Capacitor	0.001μF		1
182,282	QFM41HJ-152	Mylar Capacitor	0.0015μF	"	2
184,284	QFM41HJ-104	"	0.1μF	"	2
		F 0 :		0517	
185,285	QET41ER-476N	E. Capacitor	47μF	25V	2
187,287	QFM41HJ-103	Mylar Capacitor	0.01μF	50V	2
188,288	QFM41HJ-562	"	0.0056μF	"	2
190,290	QCS12HJ-201	C. Capacitor	200pF	"	2
		o. dapacitoi		"	2
191,291	QCS11HJ-391	-	390pF		2
192,292	QFS32BK-221	"	220pF		
195,295	QFM41HJ-392	Mylar Capacitor	0.0039μF	50V	2
196,296	QCS11HJ-681	C. Capacitor		"	2
			680pF		
21	QFP82AJ-223	Polypropylene capacitor	0.022μF		1
24	QFM41HJ-103	Mylar Capacitor	0.01µF	50V	1
25	QET41HR-475N	E. Capacitor	4.7µF	11	1
66	QFP82XJ-472	Polypropylene Capacitor	0.0047 µF	**	1
				4.00	-
51	△QET41CR-477N	E. Capacitor	470μF	16V	1
52,53	<b>∆QCF12HP-103</b>	C. Capacitor	$0.01 \mu F$	50V	2
54	△QET41VR-477N	E. Capacitor	470μF	35V	1
55					
	QET41ER-477N		470μF	25V	1
56	△QET41ER-337N	"	330µF	25V	1
61	QET41VR-336N	E. Capacitor	33µF	35V	1
62	QEB41EM-476N				
		E. Capacitor (Low Leak)	47μF	25V	1
63	-100W	"	10μF	"	1
65	⚠QET41VR-227N	E. Capacitor	220μF	35V	1
67	QET41HR-105N	L. Oupacitoi			
	1 GF141UU-100IA		IμF	50V	1
		**			
901 902	QET41CR-337N QET41CR-336N	"	330μF 33μF	16V	1

Ref. No.	Parts No.	Parts Name	Remarks	Q'ty
VR101,201	QVE5A3A-054F	V. Resistor	Input level $50$ k $\Omega$	2
	TAZ336499-03	Volume Lug	for Input level	1
VR102,202	QVP8AQB-024	V. Resistor	P.B and REC 20kΩ	4
181,281				
VR103,203	QVP4A0B-224	11	Bias 22k Ω	2
VR104,204	QVP4A0B-104	"	Bias $10k\Omega$	2
VR151,251	QVP8A0B-013	11	VU meter 1kΩ	2
L101,201	TAC000493-01	Indicator	TK22	2
L102,202	VQZ0009-001	Dolby NR Filter	81k	2
L103,203	VQZ0004-001	" test	19k	2
L183,283	VQP0001-183	Indicator	TOR	2
L182,282	" -562	"		2
L2	VQH1009-012	OSC Coil		1
	VMJ5002-002	Mic & HP. Jack Ass'y		
	VMJ6002-002			1 1
	QMC9014-006	PIN jack Ass'y		
\$104,204	QSP2210-061	PIN Socket Push Switch	for DIN	1
			for DIN	1
\$101,201	QSSG201-102	Slide Switch	for R/P	1
S102,202	QSL2209-002	Lever Switch	for Dolby NR	1
S103,203	QSL8409-001	D . D:	for Tape Selector	1
	VMZ0005-001	Post Pin		5
	E43727-002	Wrapping Tab		25
	E40130-001	Tab	for Lamp	2
E4 E6	∆TAZ000331-02	Fuse Holder		6
F1,F2	<b>△</b> QMF51A2-R50	Fuse	KD-A11A/E	2
	△OMF51A2-R50BS	Fuse	KD-A11B	2
F3	△QFM51A2-R50	"	KD-A11A/E	
	△QFM51A2-R63BS		KD-A11B	1
	VMH4003-001	Heat Sink	for X51	1
	SDSP3006ZS	Screw	Heat Sink ∼ P.W.B	1
	LPSP3008ZS	"	for X51	1
D61,62,63	MA150	Si. Diode		3
D151,251,152,252	0A90	Ge. Diode		4
D51,52,53,54 67,903	10E1-B	Si. Diode		6
D68	RD6.8E (B3)	Zener Diode		1
D55	ARD22E (B3)	"		1 1
X51	∆2SC1162 (BC)	Si. Transistor		1
X62	∆2SC1318 (R.S)	"		1
X101,201,102,202	2SC1327 (T.U)	"		6
181,281				0
X103,203,104,204	2SC1684 (R.S)	"		6
64,65	000400=====	"		
X1,2,61,63,66	2SC1685 (R.S)			5
IC101,201	NE646BN	IC	Dobly NR	2
IC901	UPC4557C	"	HP & VU meter Amp	1
	VMA4114-001	Shield Plate		1
	VMA4115-001	Shield Plate		1

### Other P.W. Board Parts List

Ref. No.	Parts No.	Parts Name	Remarks	Q'ty
(LED)				
	⚠ VMW1541-002B	P.W.B.		_
	∆ SLP-155B-01V	LED	REC	1
(Reed Switch)				
		P.W.B.		1
	TDS271409-01	Reed Switch		1
R75	QRD147J-182S	C. Resistor		1
C68	QCF11HP-223	C. Capacitor		1
	TER271414-01	Spacer		1

### **Packing**



Position of control and switch knobs at renew packing.

Power switch ; OFF
Rec level control ; MIN
Tape select ; SA/CrO2
DOLBY NR ; ON
Mecha operation buttons ; OFF

Counter ; 000.

#### **Packing Material List**

Ref. No.	Parts No.	Parts Name	Remarks	Q'ty
1~2	VPA3140-00B	Packing Case Ass'y	KD-A11A/B/E/J/U	1 set
1~2	" -00E	"	KD-A11C	1 set
1	VPA3140-003	Case	KD-A11A/B/E/J/U	1
1	" -006	"	KD-A11C	1
2	VPH2128-001	Cushion		2
	QPGA060-06005	Envelope	for set	1
	AP4056A-036	"	for power cord, provided cord	2
	QPGB024-03404	"	for Instruction Book	1
	TKS000501-01	Sheet	for set	1

No. 4192

### Accessories

Parts No.	Parts Name	Remarks	Q'ty
VMP0002-00A	PIN Cord	KD-A11A/C/J/U	2
CN-201	DIN Cord	KD-A11B/E	1
VYA4001-00A	Head Cleaning Stick		1
VNN0062-301	Instruction Book		1
BT20029B	Warranty Card	KD-A11A	1
VND4013-001	Warning Label	KD-A11A	1
T46328-003	Caution Label	KD-A11A/B	1
VPZ4001-001	Serial Ticket	KD-A11A/J	1
BT20013C	Guarantee Certificate	KD-A11B	1
TJL000443-01	Seal	KD-A11B	1
	BEAB Label	KD-A11B	1
VND4013-001	Warning Label	KD-A11B/E	1
QZL1002-003BS	Warning Label	KD-A11B	1
T46328-005	Caution Label	KD-A11J	li
VNC5004-001	Mark Sticker	KD-A11B/E	1
VJD4011-002	Dolby NR Label	KD-A11B/C/E/J/U	1
VPZ4001-001	Serial Ticket	KD-A11B/E/U	1
BT20025C	Warranty Card	KD-A11C	1
T44362-001	CSA Marker	KD-A11C	1
TLT000505-01	UL/CSA Caution Label	KD-A11C/J	2
T43758-003	Serial Ticket	KD-A11C	2
T46328-004	Caution Label	KD-A11E	1
BT20032B	Warranty Card	KD-A11J/U	1
BT20042	Special Replay Card	KD-A11J/U	1
E7795-1	EP Mark	KDA11U	1
V04062-001	Siemens Plug	KD-A11U	1
T46328-001	Caution Label	KD-A11U	1
VNC5311-101	Caution Card		1
BXN750110UU	JVC Mic Guide		1